

DIGITAL HOME THEATER SYSTEM HT-DM150

Instruction Manual

















CLASS 1 LASER PRODUCT KLASSE 1 LASER PRODUKT LUOKAN 1 LASER LAITE KLASS 1 LASER APPARAT PRODUCTO LASER CLASE 1



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CLASS 1 LASER PRODUCT

This Compact Disc player is classified as a CLASS 1 LASER product.

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION-INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED, AVOID EXPOSURE TO BEAM.



This symbol indicates that dangerous voltage which can cause electric shock is present inside this unit.



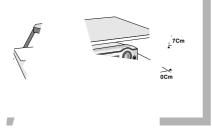
This symbol alerts you to important operating and maintenance instructions accompanying the unit.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

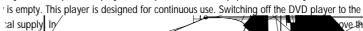
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

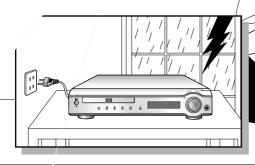


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se complies with the identification sticker located on the back of your player. Install your player ith enough space around it for ventilation (3~4inches). Make sure the ventilation slots are not player. Do not place the player on amplifiers or other equipment which may become hot.





During trunderstorms, disconnect the main plug from the socket.

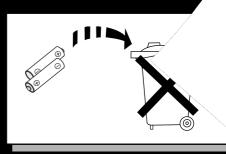
Main voltage peaks due to lightning could damage the



Protect the player from a sture(dripping or splashing and that filled with liquids, sure as vases, shalf be placed on the player), heat(e.g. fireplace or equipment creating strong magnetic or e (i.e. speakers). disconnect the power capite from the mains ele if the player malfunction, your player is not

for domestic purp Condensation

as for r





DVD (Digital Versatile Disc) offers fantastic audio and video, thanks to Dolby Digital surround sound and MPEG-2 video compression technology. Now you can enjoy these realistic effects in the home, as if you were in a movie theater or concert hall.





DVD players and the discs are coded by region. These regional codes must match in order for the disc to play. If the codes do not match, the disc will not play.

The Region Number for this player is given on the rear panel of the player.

(Your DVD player will only play DVDs that are labeled with identical region codes.)

Do not use the following types of disc!

- LD, CD-G, CD-I, CD-ROM and DVD-ROM cannot be played on this player.
 If such discs are played, a "WRONG DISC FORMAT" message appears on the TV screen.
- DVD discs purchased abroad may not play on this player.

 If such discs are played, a "WRONG REGION CODE" message appears on the TV screen.

Copy Protection

- Many DVD discs are encoded with copy protection. Because of this, you should only connect your DVD player directly to your TV, not to a VCR. Connecting to a VCR results in a distorted picture from copy-protected DVD discs.
- This product incorporates copyright protection technology that is protected by methods claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.



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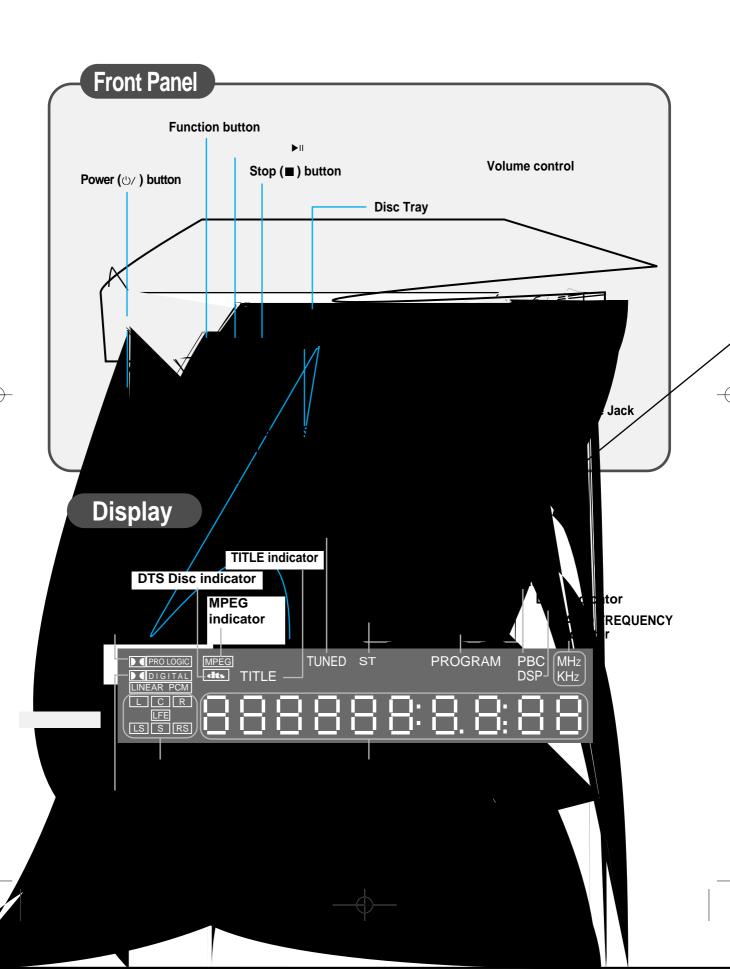
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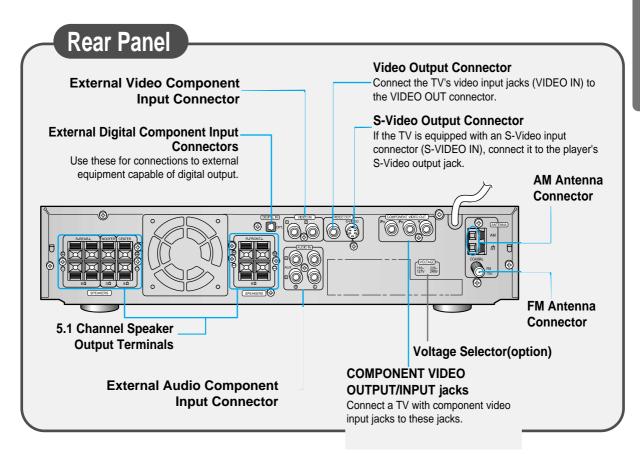
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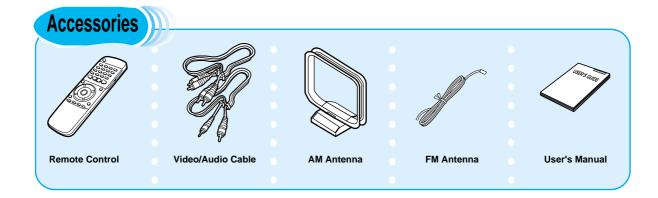
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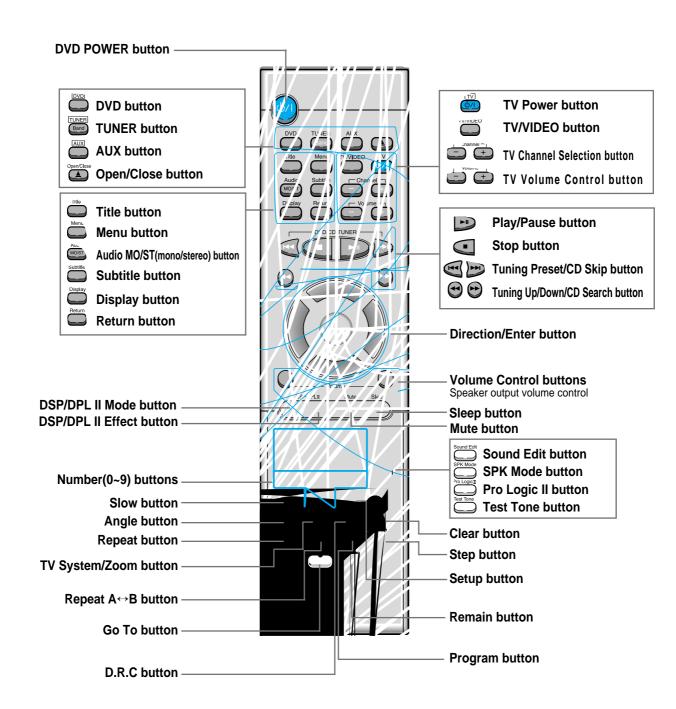




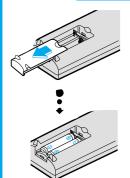








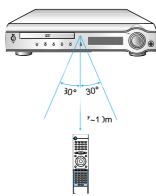
Insert Remote Batteries

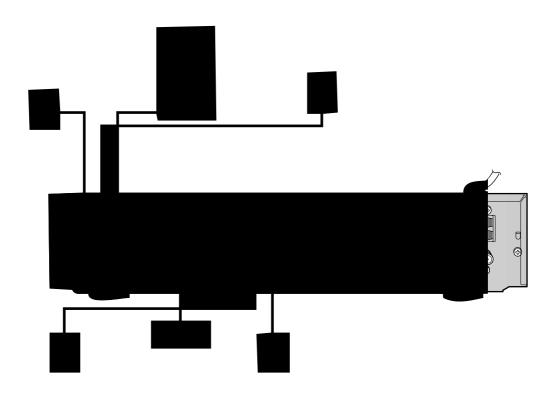


- Remove the battery cover on the back of the remote by pressing down and sliding the cover in the direction of the arrow.
- 2 Insert two 1.5V AAA batteries, paying attention to the correct polarities (+ and –).
- Replace the battery cover.

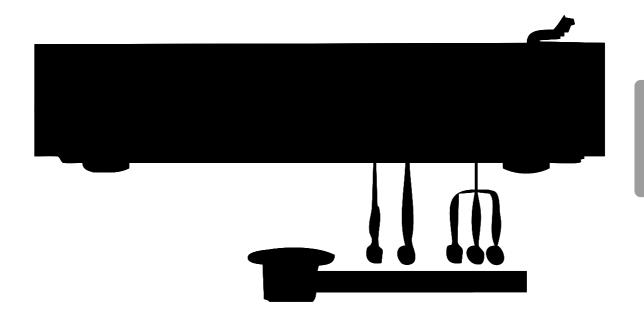
Range of Operation of the Remote Control

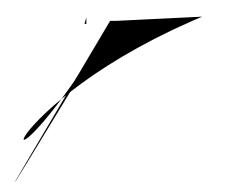
The remote control can be used up to approximately 23 feet/7 meters in a straight line. It can also be operated at a horizontal angle of up to 30° from the remote control sensor.

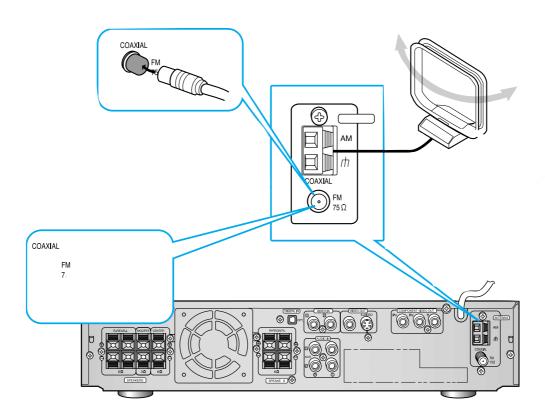




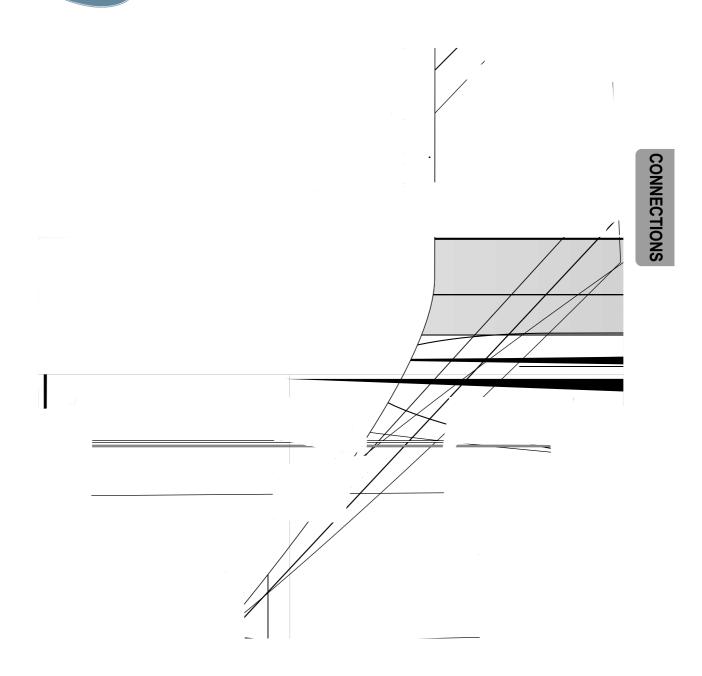






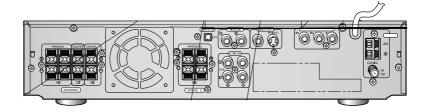


AUX Connections





Connecting your System to the Power Supply





Before Using the DVD Player

Your DVD player is capable of playing DVD, VCD, and CD discs.
User instructions may vary depending on the type of disc. Read the instructions carefully before use.

1

Turn on the power to your DVD player and TV.





2

Select a video mode by pressing the TV/VIDEO button.

TV/VIDEO



.3

Press the DVD button to select the DVD input function.





Prepe-

rations before

use

- The "WAIT" message that appears on the display for about 4~5 seconds when turning on the power or selecting a DVD function indicates a stabilization period for optimizing the condition of your DVD player. While the message is being displayed, other buttons remain inactive.
- When the power is not turned on, press down the Stop (■) button on the main unit for over 5 seconds.
 - The product will be initialized to its optimum state.
- As to some operational features such as the Speaker mode, Test tone, Volume, etc. your DVD player will not display their operation on the TV screen.

TV Broadcast System

- This device is designed to work with the PAL video format.
- For normal playback, the video format a DVD disc is recorded in must coincide with your TV's video format.

TV System Selection

Press the TV System button while in stop mode.

- Each time the TV System button is pressed, "NTSC, PAL" are selected in this order.
- Different countries use different types of TV broadcast systems, video, audio and channel systems.

Example: The player cannot playback PAL-encoded DVD with NTSC-TV



1

Press the **Open/Close**(**▲**) button to open the disc tray.



• The button is located only on the Front Panel of the player (not on the remote).

2

Insert a DVD disc.



 Place a disc gently into the tray with the disc's label facing up.

3

Press the **Open/Close**(▲) button again to close the disc tray.



Playback starts automatically.

Pausing Playback



Press the Play/Pause (►II) button during playback.

To resume, press the Play/Pause (►II) button again.



- Depending on the disc, the initial disc information screen may look different from disc to disc.
- When playing a DVD containing MPEG format, video may not be reproduced correctly and you may get picture distortion.

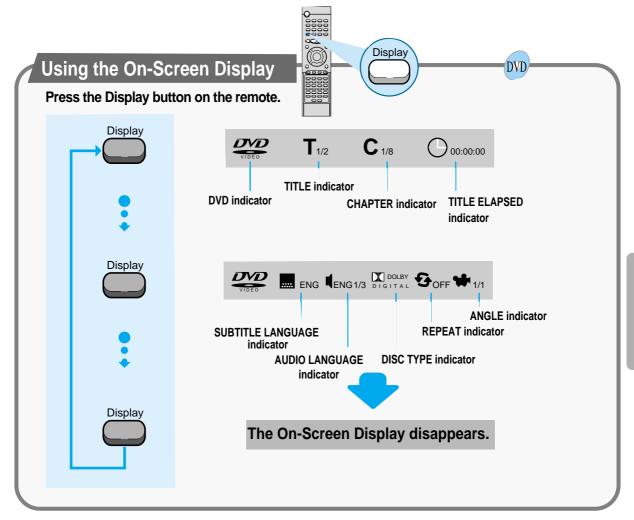
Stopping Playback



Press the Stop (■) button during playback.

- During playback, when the Stop (■) button is pressed, the position is stored in the memory, and ►■ STOP is shown on the display.
 - When the Play/Pause (►II) button or Return button is pressed subsequently , playback resumes from the position at which it was stopped.
- If the Stop (■) button is pressed a second time, the 'resume play' memory function is canceled, and ■ STOP is shown on the display. When the Play/Pause (▶II) button is pressed, playback starts from the beginning.

15



What is a Title?

A movie contained in a DVD disc.

What is a Chapter?

Each Title on a DVD disc is divided into several smaller sections called "chapters".

Turning the sound off temporarily?

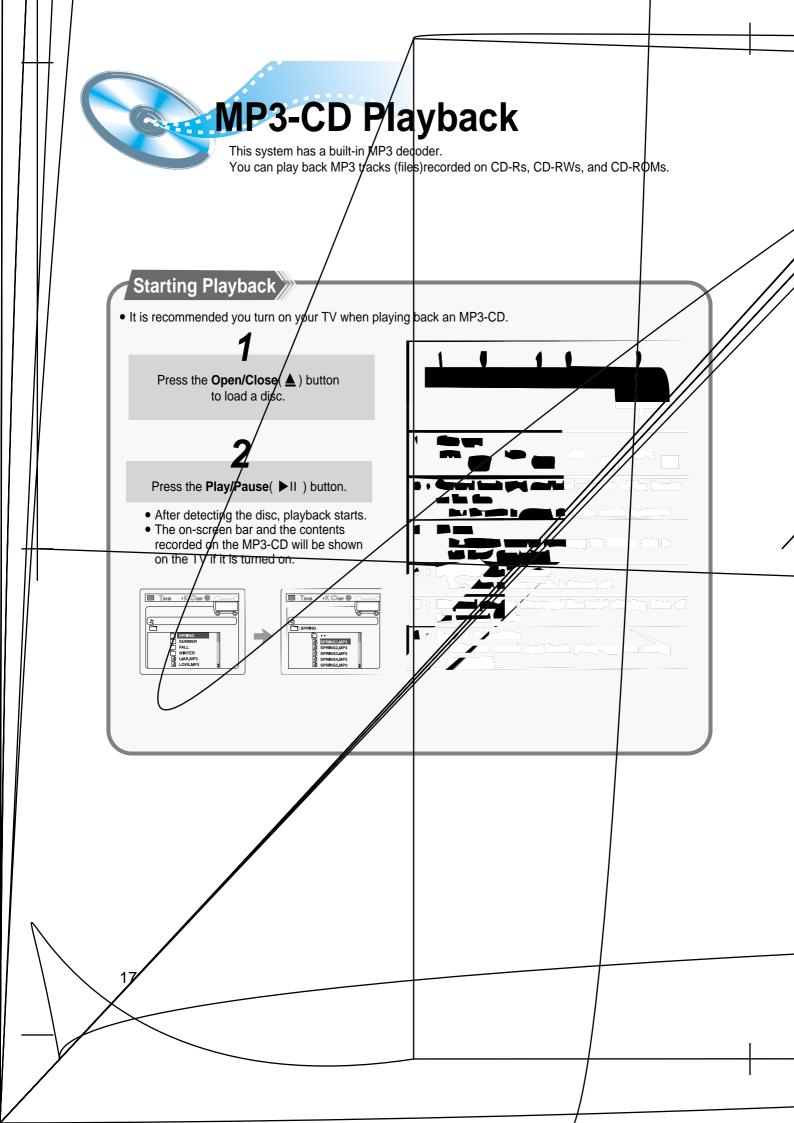


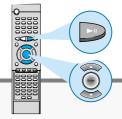
Press the Mute button during playback.

• This operation may be useful when you need to greet the guests or answer the telephone.



If the player is left for more than 3 minutes in pause mode, it will stop.





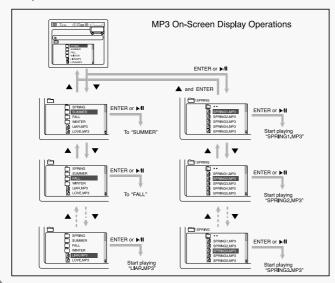
Operations Using the On-Screen Display

Turn on your TV when playing back an MP3 disc.

When the loaded MP3 disc is recognized, the following on-screen display appears on the TV screen.

(The contents of this on-screen display vary according to the disc — the way MP3 tracks were recorded on the disc.)

Button	To do
ENTER, ▶II	Start playback or go into a directory.
▲ /▼	Select a track or directory.



Repeating Playback

On an MP3 disc, Repeat A↔B cannot be used. You can enjoy only repeat play.

Press the Repeat button.

The indication corresponding to the selected mode appears on the TV screen.

• Each time you press the button, repeat mode changes as follows:



REPEAT:RANDOM

: All tracks recorded on the disc will be played once in random order.

REPEAT:ONE

: Current track will be repeated.

REPEAT:DIR

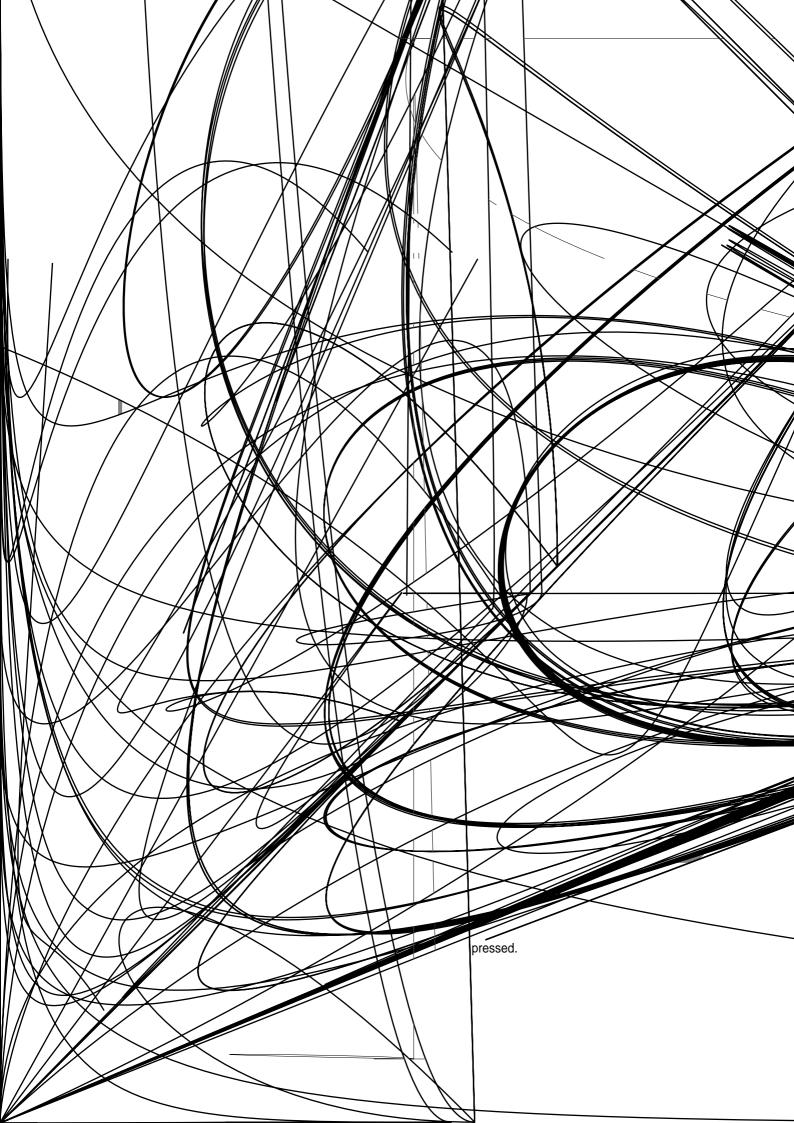
: Tracks in the current directory will be repeated.

REPEAT:DISC

: All tracks on the disc will be repeated.

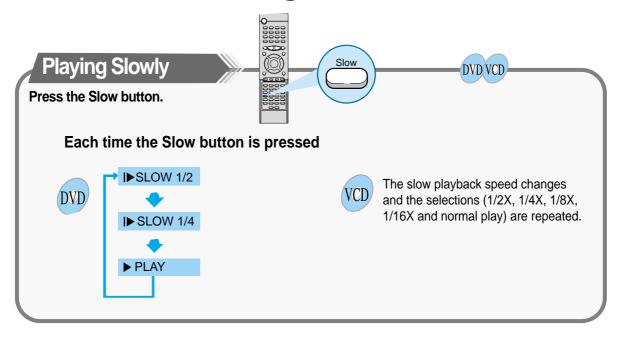
REPEAT OFF

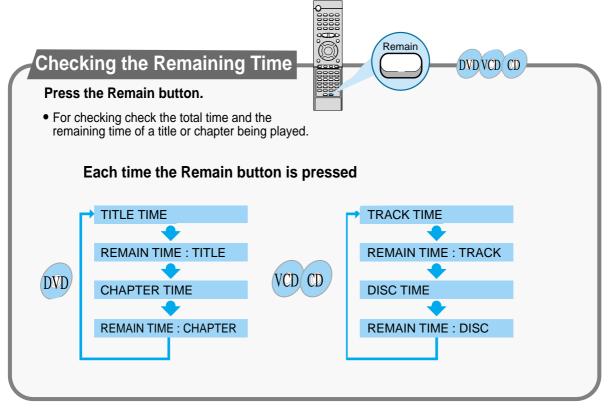
: Repeat play is canceled.(Normal play is resumed.)





Slow Playback/Checking the Remaining Time









Using Disc Menu/Title

To Select the Disc Menu

You can use the menus for the audio language, subtitle language, profile, etc. DVD menu contents differ from disc to disc.

Press the **Menu** button during playback.

Use the **Up/Down** (▲ / ▼) or **Left/Right**(◀ / ▶) button to access the different features.

3

DVD

Press the **Enter** button.

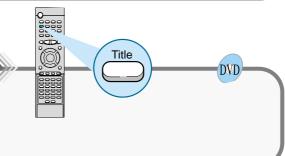
- The Menu Screen appears.
- When playing a VCD version 2.0, you can operate it using PBC On/Off function.

• The selected item will play.

Using the Title Menu

For DVDs containing multiple titles, you can view the title of each movie.

Depending on the disc, this function may either not work at all, or may work differently.



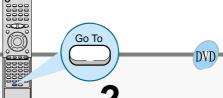
To move directly to a title chapter or time

1

Press the Go To button.

• Each time the button is pressed, it repeats as shown below.





Press Number(0~9) button or the **Left/Right** (\blacktriangleleft / \blacktriangleright) button.

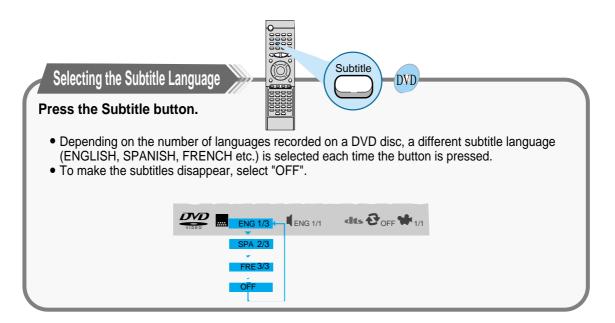
- Each time the buttons are pressed the desired scene is located and then played.
- Depending on the disc, the Title function may not work.



Selecting the Audio Language/Subtitle Language

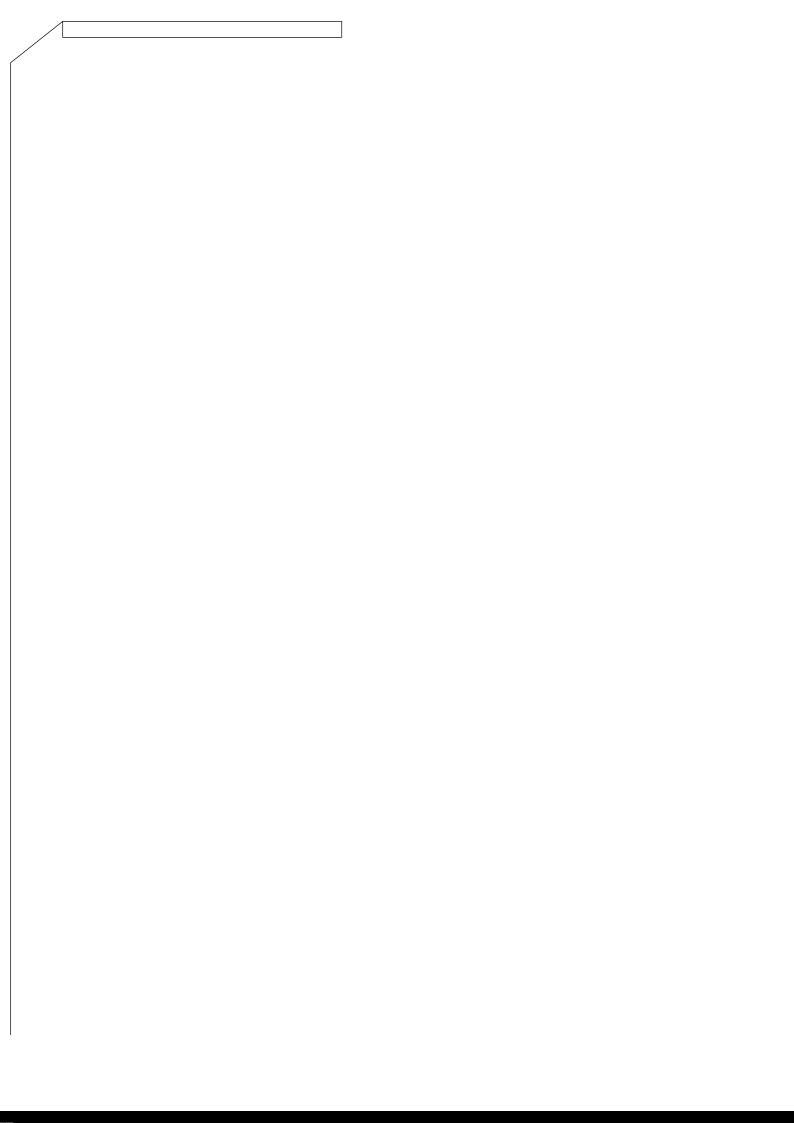


Depending on the disc, DTS or DIGITAL PRO LOGIC can be selected.





- If the word OINVALID appears on the TV screen while buttons are being operated, that operation is not possible with that particular disc.
- Depending on the disc, the audio or subtitle language function may not work.





Program Playback

Use this function with video and music CDs to play the tracks in a particular order.

To Program Tracks in a particular order

Program

1

Press the **Program** button.

2

Press the **Enter** button then use the Number buttons to select the desired title.

Press the **Enter** button, then use the Number buttons to select the desired chapter.

 You can use also just the Up/Down/Left/ Right/Left/Right (◄/ ►/ ▲/ ▼) button. You can use also just the Up/Down/ Left/Right(✓ / ► / ▲ / ▼) button.







4

Press the Enter button.

5

At this time, you can continue programming if you want to.

To Playback the Tracks in the Programmed Order

 The selected track number is programming and the cursor moves to the next number.

 When programming more than 10 tracks, select EXT | and then press the Enter button. The program selection screen where you can program up to 10 additional tracks appears.



Press the **Play/Pause** (▶II) button.





To Cancel the Programming

Press either the **Program** button or **Stop** () button.

To Change the Program

Press the **Up/Down** ($\blacktriangle/\blacktriangledown$) button to select the track number to be changed.

• The cursor moves to the next number when the **Enter** button is pressed again.

4

Press the Enter button.

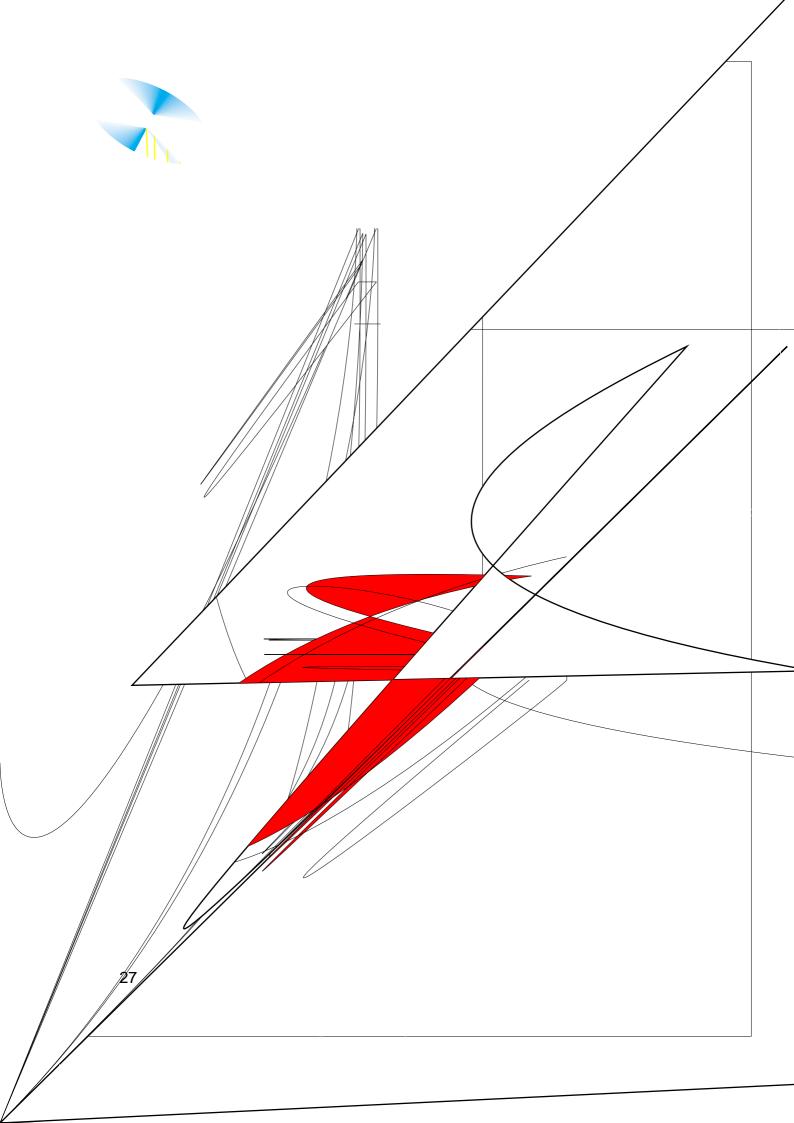
5

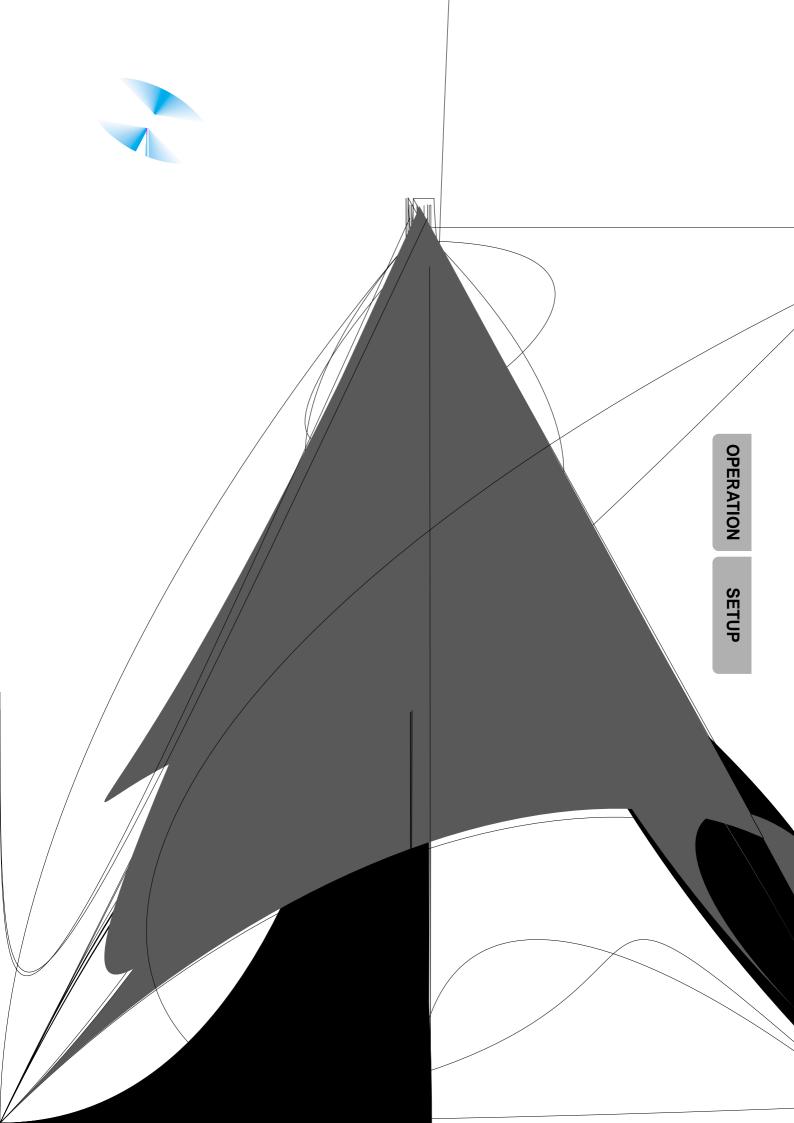
Repeat steps 1-4 above to change the program.

• The cursor moves to the number below.

- Press the **Stop** () button twice during playback.
- Press the **Stop** () button once when in the Stop mode.
- Press the Open/Close () button on the main unit.
 The disc tray will open and then close. The program will then be deleted.

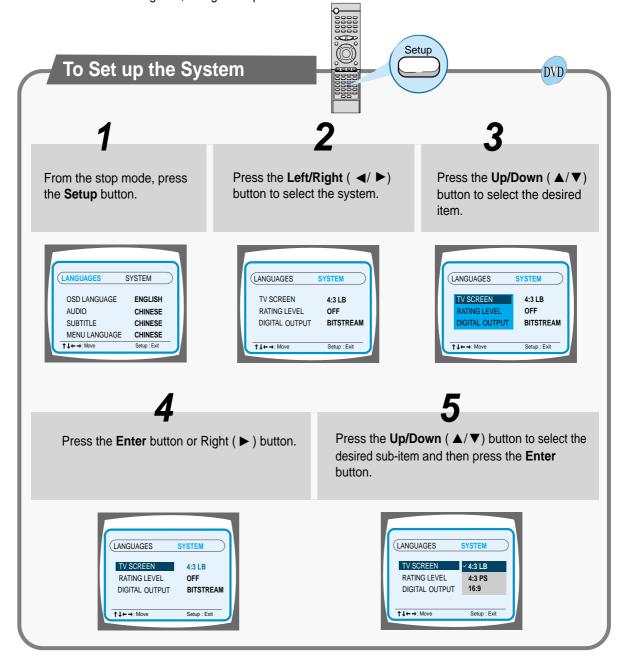
You can program or change particular tracks for VCD or CD discs in the same manner.





System Setup

You can use the DVD player's Setup function to select the TV screen ratio, rating limit, or digital output mode.



To End the System Setup

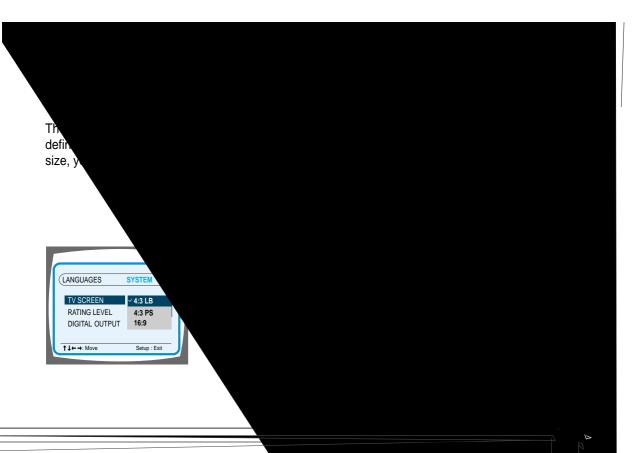
• Press the **Setup** button again.



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30



RATING LEVEL

The Rating Level function works in coarating, to help control the types of DV



1. Select RATING LEVEL, then press Enter button.



- 2. Use the number(0~9) buttons to input a 4-digit password.
 - The player's password is set to "7890" by default.





- There are up to 8 rating levels on a disc.
- If LEVEL 6 is selected, a disc which contains rating LEVEL 7 and above be played.
- If you select NEW PASSWORD, the screen changes and enables you to enable the new password.





1

Press the SPK Mode button.

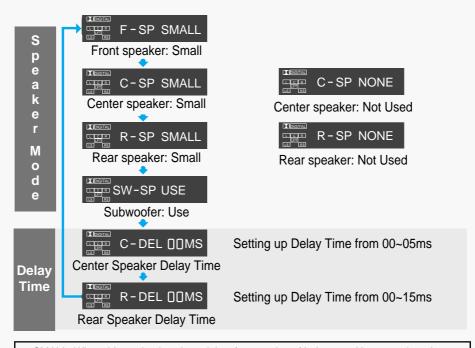
2

DVD

SPK Mode

Press the **Left/Right** (◀ / ▶) button to select the desired item.

• Each time the button is pressed, a different mode selection is displayed on the front panel display as shown below.



- SMALL: When this setting is selected, low frequencies of below 200 Hz are assigned to the subwoofer only.
- USE: Select when using speakers.
- NONE: Select this when no speakers are installed.



The display changes depending on the current audio output mode (DSP, PRO LOGIC, 3-STEREO, STEREO, etc.).

Setting up the Speaker Delay Time

When 5.1CH Surround Sound is played, you can enjoy the best sound if the distance between you and each speaker is the same. Since the sounds arrive at the listening position at different times depending on the placement of speakers, you can adjust this difference by adding a delay effect to the sound of the Center Speaker and Surround Speakers.

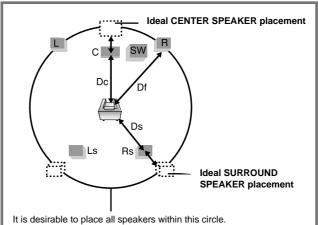
Setting CENTER SPEAKER

If the distance of Dc is equal to or longer than the distance of Df in the figure, set the mode as 0ms. Otherwise, change the setting according to the table.

Distance between Df and Dc	Delay Time
50	1.3 ms
100	2.6 ms
150	3.9 ms
200	5.3 ms

 Setting REAR (SURROUND) SPEAKERS If the distance of Df is equal to the distance of Ds in the figure, set the mode as 0ms. Otherwise, change the setting according to the table.

Distance between Ds and Dc	Delay Time
200	5.3 ms
400	10.6 ms
600	15.9 ms

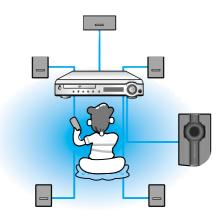


- Df: The distance from FRONT SPEAKER
- Dc: The distance from CENTER SPEAKER Ds: The distance from SURROUND SPEAKER



Speaker delay time setting is a professional sound volume adjustment method for audio enthusiast. For home use, refer to "Setting up the Ideal Speaker Positions" below to install speakers in appropriate locations.

Ideal Speaker Placement



Front Speakers

Set the front speakers so that their tweeters (high-range) are aligned at about ear level and at a horizontal angle of 45° to the prime listening position.

Center Speaker

Ideally the center speaker should be positioned with its top surface flush with the front speakers. However, you may place the speaker either on top or near the bottom of your TV set.

Rear Speakers

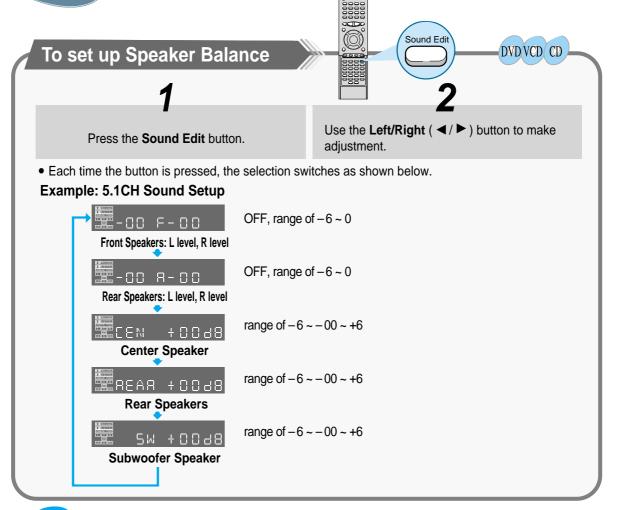
Set the rear speakers further back parallel to the walls, at 60 to 90 centimeters (2 to 3 feet) above prime listening position ear level.

If the space behind the listening position is insufficient (i.e., too close to the wall), place the rear speakers facing each other on either side.

Subwoofer Speaker

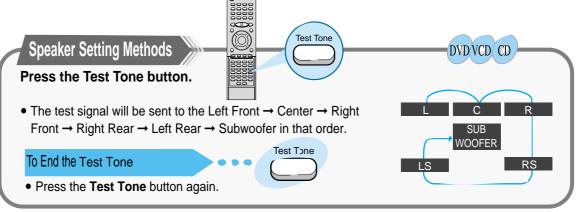
Place the subwoofer at any convenient location within the vicinity of the listening position.







The display changes depending on the current audio output mode (DSP, PRO LOGIC, 3-STEREO, STEREO, etc.).

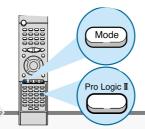




While in DSP or PRO LOGIC mode, TEST TONE may operate differently for VCDs or CDs.







Dolby Pro Logic II

DVD VCD CD

Dolby Pro Logic II is a new format for playing multichannel audio signals that offers improvements over conventional Dolby Pro Logic. It can be used to decode not only sources recorded in Dolby Surround, but also regular stereo sources into five channels (front left/right, center and surround left/right). In addition, various parameters can be set according to the type of source and the contents, so you can adjust the sound field with greater precision.

1

Press the **Function** button on the front panel to select the desired function.

Select from FM → AM → DVD → DIGITAL IN → AUX 1 → AUX 2.

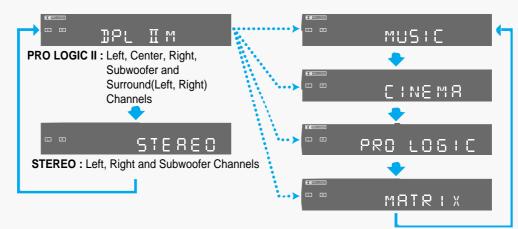
2

Press the Pro Logic II button.

3

Press the DSP/DPL II Mode button.

• Each time the **Pro Logic II** button is pressed. • Each time the DSP/DPL II **Mode** button is pressed.



Pro Logic II Mode

Select one of the modes ("MUSIC", "CINEMA", "PRO LOGIC" or "MATRIX").

- The Music mode is recommended when listening to CDs or watching DVDs with mostly musical content.
- The Cinema mode is best when watching movies.
- The Pro Logic mode offers the same surround processing as original Pro Logic and is best used when the source contents are not of optimum quality.
- The Matrix mode is useful for when the audio is mono.



Dolby Pro Logic II Effect Function

• Each time the DSP/DPV II Effect button is pressed.

Panorama Mode

This mode extends the front stereo image to include the surround speakers for an exciting wraparound effect with side wall imaging.

• Center Width Control

This control adjusts the center image so it may be heard only from the center speaker; only from the left/right speakers as a phantom image; or from all three front speakers to varying degrees.

• Dimension Control

This control gradually adjusts the soundfield either towards the front or towards the rear.

Note

When playing a DVD encoded in two or more channels, DOLBY PRO LOGIC II mode cannot be selected.

fect



DSP modes have been designed to simulate different acoustic environments. The sound heard in a hall, theater, pavilion, dance club, or live club consists of direct

Direct sounds reach the listener directly without any reflection.

Indirect sounds are delayed by the distance of the ceiling and walls.

and indirect sound —early reflections and reflections from behind.

These indirect sounds are an important element of the acoustic surround effect.



Press the DSP/DPLII Mode button.

- This function works only in the STEREO Mode.
- The following DSP modes are provided with this unit:

HALL Provides a clear vocal and simulates the feeling of a concert hall.

THEATER Simulates the feeling of a theater.

PAVILION Simulates the spacious feeling of a pavilion with a high ceiling.

DANCE CLUB Simulates the sound of a dance club with a throbbing bass beat.

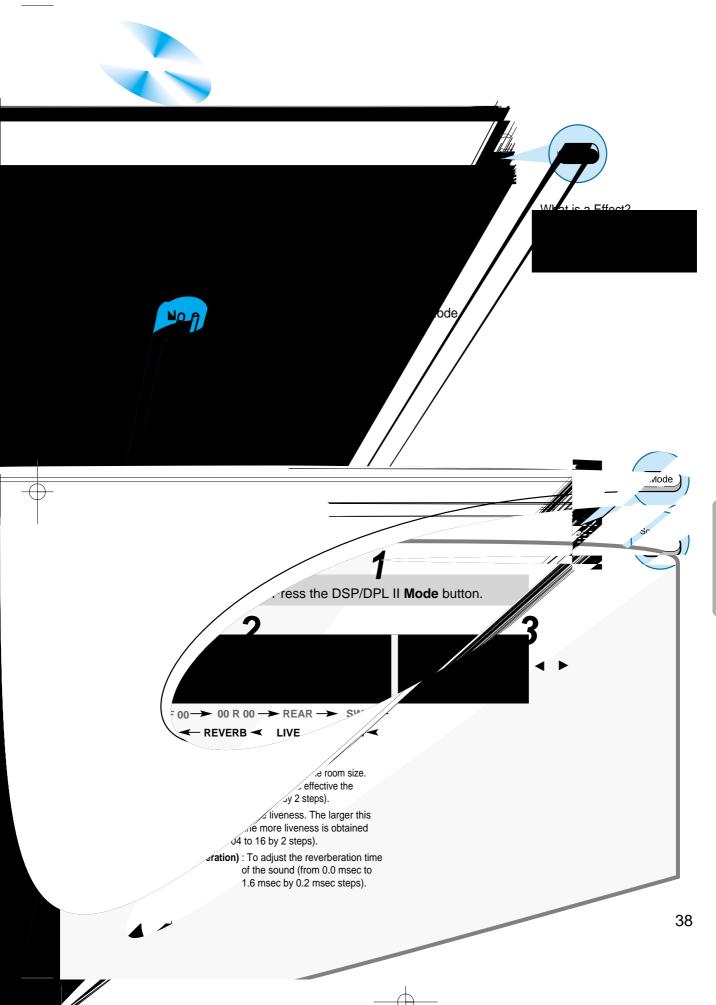
LIVE CLUB Simulates the feeling of a live music club with a low ceiling.

- These DSP modes can be used to add acoustic surround effects while reproducing stereo analog or linear PCM digital signals.
- When one of the DSP modes is selected, the DSP indicator lights up on the display.

DSP modes available according to the input signal format

O: Possible, X: Not possible

Surround		Multichannel Surround	DSP					(canceled)
			HALL	THEATER	PAVILION	DANCE CLUB	LIVE CLUB	STEREO
Input Signal format	Analog	х	0	0	0	0	0	0
	Linear PCM	х	0	0	0	0	0	0
	Dolby Digital	0	X	Х	х	х	x	x
	DTS	0	Х	Х	Х	Х	Х	Х





istening to the Radio

You can listen to the chosen band (FM, MW or LW broadcast stations) by using either the automatic tuning or manual tuning operation.

Press the Tuner(Band) button.

• The selection toggles back and forth between "FM" "MW" and "LW" each time the Tuner(Band) button is pressed.

Select a broadcast station.

Auto Station 1

When the I◀◀ ▶▶I button is pressed, a preset broadcast station is selected.

Auto Station 2

Hold in the ◀◀ ▶▶ button. Automatic searching begins, and then stops when a station is tuned in.

Manual Station

Press the ◀◀ ▶▶ button to tune to the chosen station. The frequency changes incrementally in either direction each time the corresponding button is pressed.

Main Unit

Press the Function button to select the desired band (FM, MW or LW).

Select a broadcast station.

Auto Station 1

Press the **Stop** (**II**) button to select the PRESET mode. Then press the I◄◀ ▶▶I button to select a station stored in the preset

Auto Station 2

Press the Stop () button to select the MANUAL mode on the front panel. Then hold in the button to make the unit begin automaticall searching for broadcast stations.

Manual Station

Press the **Stop** () button to select the MANUAL mode front panel. Press the I to the desired station. The frequency changes incrementally in either direction each time the corresponding button is pressed.

To Listen in Mono/Stereo



Press the MO/ST button. (only FM)

- The selection toggles back and forth between "STEREO" and "MONO" each time the MO/ST button is pressed.
- In a poor reception areas, select Mono mode for a clear, interference-free broadcast.



- 15 FM stations
- 8 MW stations
- 7 LW(Option) stations
- FM Frequency Modulation
- AM(MW) Medium Wave
- LW(Option) Long Wave



1

Press the **Tuner(Band)** button and select the FM band.

2

Select the MANUAL by pressing the **Stop** (■) button on the main unit.

3

Use the ◀◀ and ▶▶ button to tune into 89.1

• The selection toggles back and forth between " → FM → AM(MW) → LW(Option) = " each time the **Tuner(Band)** button is pressed.







4

Press the **Program** button on the remote control, FM1 will flash. If you want to save 89.1 to FM1, press Program again.



5

If you want to save 89.1 to another preset location(FM2~FM15), press

rogram to save it to that location.

		MHz
®FM5	89.	0
	PROGRAM	

89.10

6

To preset other stations, follow steps 1~5 again.

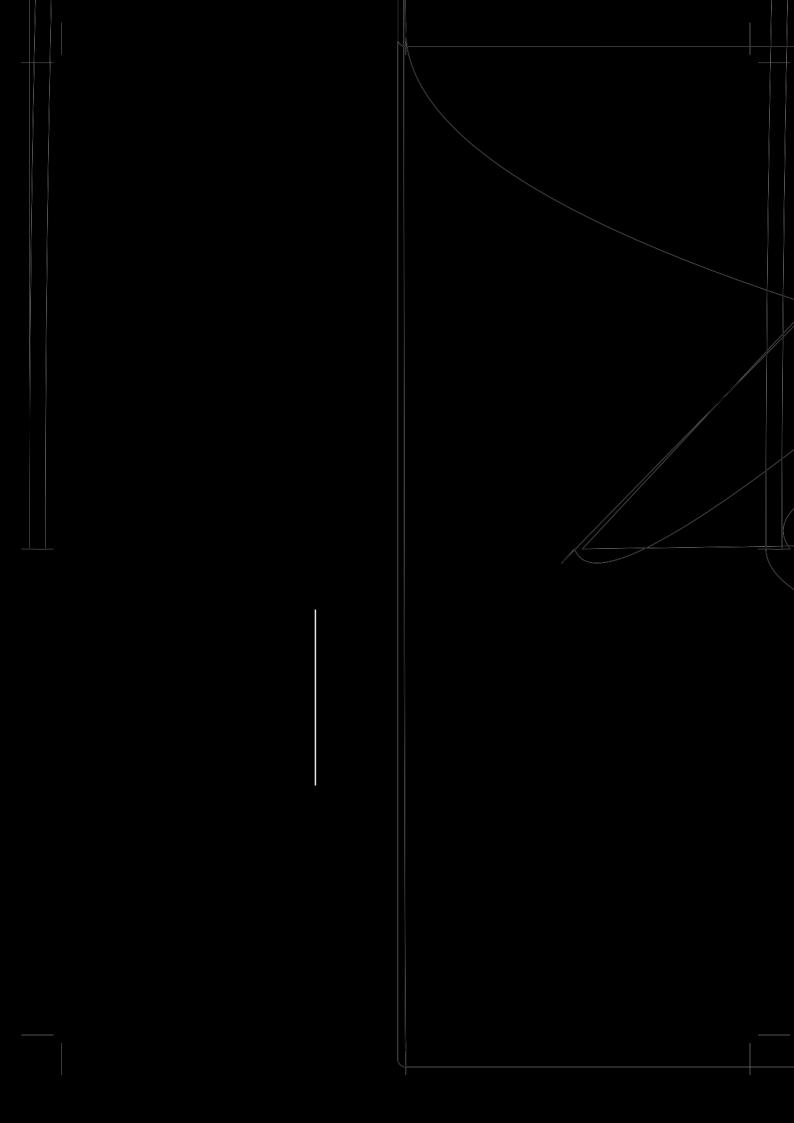
To tune in a preset station

See the previous page.



Problem	Check		
The disc tray does not open.	 Is the disc installed with the label side facing up? Is the power cord plugged securely into the power outlet? Turn off the power to the unit by pressing the Power ((')/) button and turn it back on. 		
Disc does not play.	 Check the region number of the DVD. DVD discs purchased abroad may not be playable. This player cannot play CD-ROMs, DVD-ROMs, etc. Check the rating level of the DVD. 		
Playback does not start immediately when the Play/Pause button is pressed.	Check whether the disc has any scratch marks or is deformed?		
No sound is produced.	 No sound is heard during high-speed playback, slow playback, and step motion playback modes. Are the speakers properly connected? Is the speaker Setup correctly customized? Is the disc severely damaged? The disc may be dirty. Wipe off fingerprints or dirt. 		
Sound can be heard only from a few speakers and not all six.	 When listening to a CD or radio, sound is output to the front speakers only (L/R). Select the "PRO LOGIC" option by pressing the Pro Logic button on the remote control unit to use all six speakers. Check whether your DVD disc is 5.1 CH compatible. 		
Picture does not appear; sound is not produced; the disc tray opens 2-5 seconds later.	 Was the player moved suddenly from a cold pace to a warm one? When condensation forms inside the player, remove the disc and let the player stand for 1 or 2 hours with the power on. (You can use the player after the condensation disappears.) 		
Sound quality is irregular.	 Are the speaker cables loose? Is there any dirt or debris at the end of the speaker connector?		
Dolby Digital 5.1 Channel Surround Sound is not being reproduced.	 Does the disc being played show the "Dolby Digital 5.1CH" mark? 5.1-channel sound is reproduced only if the disc is recorded with 5.1 channel sound. Is the DVD player connected to the proper speakers? 		

Problem	Check
 The disc revolves but no picture appears. Picture shows interference and quality is poor. 	 Is the TV power turned on? Are the video cables properly connected? Is it the player in PAUSE mode? Is your TV's video format (NTSC/PAL) set correctly? Press the NTSC/PAL button once again to change the current selection. Is there any dirt on the disc, or is the disc damaged? It may not be possible to play some DVD discs due to poor manufacture. When a dark scene changes to a bright scene during playback, the screen may flicker vertically. Some disturbance is normal.
Remote control unit does not operate.	 Is the remote control being used within the appropriate distance and angle of operation for the unit? Are there any obstacles between the remote control unit and the remote control sensor? Are the batteries dead? Is it time to replace the batteries with new ones?
Audio or subtitle language does not operate.	The audio or subtitle language features does not operate with DVDs that do not include multiple audio or subtitle languages.
The Menu button is pressed but the Menu screen does not appear.	 Is the remote control being used within the appropriate distance and angle of operation for the unit? Are the batteries dead? Does tje disc have a Menu?
The screen ratio cannot be changed.	You can play 16:9 wide DVDs in 16:9 WIDE mode, 4:3 LETTER BOX mode or 4:3 PAN-SCAN mode; but 4:3 encoded DVDs only show in 4:3 ratio. Refer to the DVD disc jacket and then select the appropriate function.
The desired radio station cannot be tuned in.	 Is the antenna installed properly? When the antenna's input signal is weak, install an external FM antenna in an area with good reception quality.
The system is malfunctioning (the system does not work or no sound).	While the player is in the stop mode, hold the Stop (■) button down on the main unit for over 5 seconds."INITIAL" appears on the display and all settings will return to the Factory Preset condition. The RESET function erases all settings; do not use this function unless necessary.







G E	Power Consumption	120W	120W			
E N	Weight	6.6Kg				
N E R	Dimensions (W x H x D)	360mm x 76mm x 365mm				
R A	Operating Temperature Range	+5°C~+35°C				
Ê	Operating Humidity Range	10%~75%				
F U	Usable Sensitivity	10dB				
F U M N	S/N Ratio	60dB				
M N E R	Distortion	0.5%				
Ţ	Usable Sensitivity	54dB				
TUNER A M	S/N Ratio	40dB				
E	Distortion	2%				
0	Composite Video	1.0Vp-	o(75Ω load)			
V O		Y : 1.0\	/p-p(75Ω load)			
L T	Component Video	Pr : 0.7Vp-p(75Ω load)				
E P		Pb : 0.7Vp-p(75Ω load)				
ου	S-VIDEO	Luminance Signal: 1.0Vp-p(75Ω load)				
•	2-VIDEO	Color Signal: 0.286Vp-p(75Ω load)				
Α	Front speaker output	40W x 2(6Ω), Distortion 10%				
M	Center speaker output	40W(6Ω), Distortion 10%				
P	Rear speaker output	40W x 2(6Ω), Distortion 10%				
L	Subwoofer speaker output	70W(3Ω), Distortion 10%				
F	Frequency range	20Hz~25KHz				
1	S/N Ratio	75dB				
E R	Channel separation	50dB				
K	Input sensitivity	(AUX)500mV				
	Speaker system	5.1ch speaker system				
	Opeanor system	Front/C	enter/Rear speaker	Subwoofer speaker		
0	Impedance	6Ω x 5		3Ω		
S P	Frequency range	100Hz~18KHz		40Hz~200Hz		
E.	Output sound pressure level	87dB/W/M		86dB/W/M		
A	Rated input	40W		70W		
K E	Maximum input	80W		140W		
R	Dimensions (W x H x D)	Front/Rear	120mm x 186mm x 130mm	240mm v 267mm v 220mm		
		Center	300mm x 139mm x 121mm	210mm x 367mm x 332mm		
	Weights	Front/Rear	0.8Kg	6.0Ka		
		Center	1.0Kg	6.0Kg		



THIS APPLIANCE IS MANUFACTURED BY:



AH68-01141J